

Amendments to the Claims

This corrected listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of preventing damage when writing information in a storage layer of a multi-layer optical storage medium, the method comprising acts of:

monitoring a plurality of distinct input signals while focusing a write light beam in a focal spot at a target storage layer ~~to detect an axial focus displacement event~~, an error on two or more of the plurality of distinct input signals indicating ~~the~~ an axial focus spot displacement ~~event~~; and

inhibiting the writing process in case of the axial focus spot displacement ~~event~~.

2. (Currently amended) A medium access device for preventing damage when writing information in a storage layer of a multi-layer optical storage medium, the medium access device comprising:

a light beam generator for generating a write light beam;

a write inhibit circuit for monitoring a plurality of distinct input signals while focusing the write light beam in a focal spot at a target storage layer ~~to detect an axial focus displacement event~~, an error on two or more of the plurality of distinct input signals indicates ~~the~~ an axial focus spot displacement ~~event~~.

3. (Currently amended) The medium access device according to claim 2, further comprising a driver circuit for driving the light beam generator in accordance with a data signal representing data to be written, the driver circuit having a control input, wherein the write inhibit circuit have an output coupled to said control input of the driver circuit, the write inhibit circuit is designed to generate a command signal for the driver circuit to effectively inhibit the driver circuit in case of an axial focus spot displacement event.

4. (Canceled)

5. (Currently amended) The access device according to claim 2, wherein the write inhibit circuit has at least three inputs for receiving at least three different input signals capable of indicating an axial focus displacement;

the write inhibit circuit is designed to monitor at least two of its input signals and to inhibit the writing process only if at least two of the input signals are indicative in a correlated way of the occurrence of an axial focus spot displacement event.

6. (Currently amended) The medium access device according to claim 2, wherein the write inhibit circuit is designed to monitor an input signal, to calculate an axial focus displacement from the input signal, and to decide that the input signal is indicative of an axial focus spot displacement event only if the calculated axial focus displacement exceeds a predetermined displacement threshold.

7. (Currently amended) The medium access device according to claim 2, wherein the write inhibit circuit is designed to monitor an input signal, to monitor for the possible occurrence of a predefined characteristic feature of the input signal, and to decide that the input signal is indicative of an axial focus spot displacement ~~event~~ only if such characteristic feature occurs.

8. (Currently amended) The medium access device according to claim 2, wherein the write inhibit circuit is designed to monitor at least one of its input signals, to determine the speed with which said at least one of its input signals changes in time, and to decide that the input signal indicates that an axial focus spot displacement ~~event~~ is about to occur on the basis of an evaluation of such changes.

9. (Currently amended) The medium access device according to claim 8, wherein the write inhibit circuit is designed to inhibit the writing process if a time-derivative of said at least one of its input signals predicts an axial focus spot displacement ~~event~~.

10. (Previously presented) The medium access device according to claim 1, further comprising at least one vibration/acceleration sensor;

the write inhibit circuit is designed to monitor at least an output signal from the at least one of a vibration sensor and an acceleration sensor.

11. (Previously presented) The medium access device according to claim 1, further

comprising at least one optical detector for receiving light reflected from the storage medium;

the write inhibit circuit is designed to monitor at least one signal derived from at least one detector output signal.

12. (Previously presented) The medium access device according to claim 11, wherein the write inhibit circuit is designed to monitor at least one of a signal corresponding to the reflected central aperture signal obtained from a forward-sense diode of the sensor, or to monitor at least a signal corresponding to the focal error signal, or to monitor at least a signal corresponding to the focal error signal integrated with a predetermined time constant.

13. (Currently amended) The medium access device according to claim 2, wherein the multi-layer optical storage medium is selected from at least one of DVD-discs and BD discs.

14. (Currently amended) A medium access device for preventing damage when, writing information in a storage layer of a multi-layer optical storage medium, the medium access device comprising:

a light beam generator for generating a write light beam;

a write inhibit circuit

for monitoring a plurality of distinct input signals while focusing the write light

beam in a focal spot at a target storage layer, ~~to detect an axial focus displacement event~~
and

for inhibiting a writing process in case of ~~the an~~ axial focus spot displacement event, an error on two or more of the plurality of distinct input signals indicates the axial focus spot displacement event,

wherein ~~the write inhibit circuit monitors at least two input signals of the plurality of distinct input signals capable of~~ are configured for indicating an axial focus displacement, determining a speed with which said at least two input signals change in time, and deciding that at least two of the input signals indicate that an axial focus spot displacement event is about to occur on the basis of an evaluation of such change.

15. (Currently amended) The medium access device according to claim 14, wherein the write inhibit circuit is designed to inhibit the writing process if a time-derivative of said at least one input signal predicts an axial focus spot displacement event.

16. (Previously presented) The medium access device according to claim 15, wherein the time-derivative is a first order time derivative.

17. (Previously presented) The medium access device according to claim 15, wherein the time-derivative is higher than a first order time derivative.

18. (Currently amended) A medium access device for preventing damage when writing

information in a storage layer of a multi-layer optical storage medium; the medium access device comprising:

a light beam generator for generating a write light beam;

a write inhibit circuit for monitoring a plurality of distinct input signals while focusing the write light beam in a focal spot at a target storage layer ~~to detect an axial focus displacement event~~, an error on two or more of the plurality of distinct input signals indicates ~~the~~ an axial focus spot displacement event,

wherein the write inhibit circuit is designed to monitor at least two of its input signals, determine the speed with which said at least two of its input signals change in time, and decide that the input signals indicate that an axial focus spot displacement event is about to occur on the basis of an evaluation of such change.

19. (Currently amended) The medium access device according to claim 18, wherein the write inhibit circuit is designed to inhibit the writing process if a time-derivative of said at least one of its input signals predicts an axial focus spot displacement event.

20. (Currently amended) The method of claim 1, wherein the plurality of signals are ~~selected from~~ include a signal provided by a sensor that detects mechanical vibration or acceleration acting upon the medium access device; a focus coil voltage; a normalized focal signal; an axial focal displacement signal; an axial storage layer displacement signal; an axial focal displacement loop integrator accumulated error signal; an axial focal displacement error signal integrated with a predetermined time constant; a radial tracking

displacement error signal; a radial tracking loop integrator accumulated error signal; a signal indicating access of an incorrect storage layer; a signal indicating a characteristic read data feature derived from an optical detector for receiving light reflected from the storage medium or a forward-sense diode; and a forward-sense diode reflected central aperture signal; first or higher order time derivatives of said error signals; said error signals are integrated with predetermined time constants; and two or more of said error signals correlated with each other.

21. (Currently amended) The medium access device according to claim 2, wherein the plurality of signals ~~are selected from~~ include a signal provided by a sensor that detects mechanical vibration or acceleration acting upon the medium access device; a focus coil voltage; a normalized focal signal; an axial focal displacement signal; an axial storage layer displacement signal; an axial focal displacement loop integrator accumulated error signal; an axial focal displacement error signal integrated with a predetermined time constant; a radial tracking displacement error signal; a radial tracking loop integrator accumulated error signal; a signal indicating access of an incorrect storage layer; a signal indicating a characteristic read data feature derived from an optical detector for receiving light reflected from the storage medium or a forward-sense diode; and a forward-sense diode reflected central aperture signal; first or higher order time derivatives of said error signals; said error signals are integrated with predetermined time constants; and two or more of said error signals correlated with each other.